Application No.09/899,815 Amdt. dated December 18, 2003 Reply to Office Action of June 25, 2003 Docket No. 1510-1030

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-23. (canceled)

24. (currently amended) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wildtype non-wildtype protofibril, wherein said non-wild type protofibril comprises the Aβ42-Arc peptide (SEQ ID NO:1).

25-26. (canceled)

27. (currently amended) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administration to said subject a therapeutically effective antibody or an active fragment thereof, against a non-wildtype protofibril wherein said antibody is raised against a protofibril comprising an Aβ-Arc peptide.

28-31. (canceled)

32. (currently amended) The method according to claim 27, wherein said antibody or fragment thereof is monoclonal.

Application No.09/899,815 Amdt. dated December 18, 2003 Reply to Office Action of June 25, 2003 Docket No. 1510-1030

33. (currently amended) The method according to claim 27, wherein said antibody or fragment thereof is human or humanized.

34-38. (canceled)

- 39. (new) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises the peptide selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1) and A β 42-Arc (SEQ ID NO:1).
- 40. (new) The method according to claim 39, wherein said protofibril is in combination with a mutation selected from the group consisting of the (A692G), Flemish, and Iowa (D694N) mutations.
- 41. (new) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises a mutated A β peptide comprising the mutation $Glu_{22} \rightarrow Gly_{22}$.
- 42. (new) The method according to claim 41, wherein said protofibril is in combination with a mutation selected from

Application No.09/899,815
Amdt. dated December 18, 2003
Reply to Office Action of June 25, 2003
Docket No. 1510-1030

the group consisting of the (A692G), Flemish, and Iowa (D694N) mutations.

43. (new) The method according to claim 27, wherein said A β -Arc peptide is selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), and A β 42-Arc (SEQ ID NO:1)